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September 18, 2007

Mr. Guy Childs  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive  
Suite 200  
Rancho Cordova, California 95670

**Subject:** City of Patterson Water Quality Control Facility  
Response to the Tentative Waste Discharge Requirements

728-02H

Dear Mr. Childs:

On the behalf of the City of Patterson, LEE & RO is pleased to submit the enclosed responses to the Tentative Waste Discharge Requirements dated August 24, 2007. In general our comments are minor with two exceptions:

- 1) We do not feel that the City can consistently achieve a nitrate limitation in the effluent of 3 mg/L in the three treatment trains. Per the March 15, 2007 Report of Waste Discharge we request that the limit for nitrate measured as nitrogen be set at 10 mg/L. This limit is consistent with the value that can normally be achieved with a biological nutrient removal treatment system.
- 2) The Order calls for a number of investigations, workplans, and reports. These are reasonable except the City did not plan for them and did not include them in their 2007-2008 budget. Therefore, we request that the majority of this work be delayed until after July 2008. Please refer to the enclosed responses for additional clarification.

Should you have any questions regarding the enclosed comments, please do not hesitate to call me. I'm also happy to meet you in person at anytime.

Sincerely,

LEE & RO, Inc.

A handwritten signature in black ink, appearing to read 'Bob Godwin'.

Robert O. Godwin, P.E.  
Project Manager

cc: file  
Mr. Mike Willett, Patterson Public Works Director

Order	Draft Waste Discharge Requirements - Order	LEE & RO's Comments																		
3	<i>“The WWTP is located in the following Assessor’s Parcel Numbers: 047-27-03, 047-27-07, 047-27-11, 047-27-12, 047-27-13, 047-27-14, 047-28-03, 047-28-11, 047-28-14, 047-28-16, and 047-29-03 and is shown on Attachment A, which is attached hereto and made part of this Order by reference.”</i>	The parcel numbers listed are incorrect. The correct parcel numbers are 047-027-003, 047-027-011, 047-027-012, 047-027-013, 047-027-014, 047-028-003, 047-028-011, 047-028-012, 047-028-014, 047-028-016, 047-028-017, 047-029-003, 047-037-017, 047-037-018																		
8	The following is an excerpt from Order 8: <i>“Three of the pumps are for the NASTS and AIPS, and two pumps are for the SASTS. The wastewater is then pumped to a metering and headworks facility where it enters a mechanical bar screen and is separated into each of the different treatment systems.”</i>	<p>The first sentence is not correct. We recommend the sentence be revised to read: <i>“Two of the pumps are for the NASTS and AIPS, and three pumps are for the SASTS.”</i></p> <p>The second sentence is not correct. We recommend the sentence be revised to read” <i>“Influent flows enter a mechanical bar screen before being pumped from the influent pump station to two locations: the NASTS distribution structure and SASTS grinders/flow splitter structure.”</i></p>																		
9	The following is an excerpt from Order 9: <i>“The waste activated sludge that is produced by this system is discharged into Percolation Pond 1.”</i>	We recommend that the sentence be revised to read: <i>“Waste activated sludge that is produced by this system is discharged to the area drain system and returned to the Influent Pumping Station where it is transferred to the south treatment system for digestion and disposal.”</i>																		
16	<i>“In addition to the drying beds and storage facility, sand drying beds located adjacent to Pond No. 8 are also used for the temporary storage of biosolids.”</i>	To clarify, the sand drying beds located adjacent to Pond No. 8 are used for the temporary storage of <u>dewatered</u> biosolids.																		
20	<p><i>The average flow and the quality of influent entering the WWTP from August 2005 through December 2006 is presented below:</i></p> <table><tr><td><u>Constituent</u></td><td><u>Average Concentration</u></td></tr><tr><td>Average Flow</td><td>1.2 mgd</td></tr><tr><td>pH</td><td>7.4</td></tr><tr><td>EC</td><td>2,054 umhos/cm</td></tr><tr><td>BOD</td><td>252 mg/L</td></tr><tr><td>TSS</td><td>267 mg/L</td></tr></table>	<u>Constituent</u>	<u>Average Concentration</u>	Average Flow	1.2 mgd	pH	7.4	EC	2,054 umhos/cm	BOD	252 mg/L	TSS	267 mg/L	<p>The BOD and TSS does not reflect what was provided in the March 15, 2007 Report of Waste Discharge (RWD). The average flow and the quality of influent presented in the RWD were from August 2005 to <u>July 2006</u> not to December 2006. The information from the RWD is presented below:</p> <table><tr><td><u>Constituent</u></td><td><u>Average Concentration</u></td></tr><tr><td>BOD</td><td>266 mg/L</td></tr><tr><td>TSS</td><td>264 mg/L</td></tr></table>	<u>Constituent</u>	<u>Average Concentration</u>	BOD	266 mg/L	TSS	264 mg/L
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21	<i>“The average flow and the quality of effluent entering the percolation ponds from the three treatment systems from August 2005 through December 2006 is presented below:”</i>	The TSS presented in the RWD was from August 2005 to <u>July 2006</u> , not to December 2006. The information from the RWD for the South ASTS Sludge TSS should be 3.3 mg/L not 13.3 mg/L.																		

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	See Order for information	
31	<i>"The area surrounding the facility consists primarily of agricultural farmland. The nearest home with a domestic well is located on the east side of Pond No. 15. Because of the proximity of this well to the percolation ponds, this domestic well is included as part of the groundwater monitoring network."</i>	For clarification purposes, the domestic well referenced in this Order has not been tested. The City will contact the homeowner, and if the owner accepts, will include the well in the groundwater monitoring network.
38	<i>"Depth to groundwater ranges from approximately 6 to 16 feet bgs and varies depending on location, season, and local influences such as irrigation practices, groundwater extraction, the presence and stage of surface water bodies."</i>	To clarify, the depth to groundwater range stated in the Order differs from the most recent sampling results in June 2007. The current depth varies from 14.9 to 23.6 feet.
39	See Order for information	MW-9 has been taken out of service. We suggest that the MW-9 be removed from the groundwater quality table shown in this Order.
41c	<i>"Nitrate concentrations reported in MWs 1, 2, 3, 4, 5, 8 and 9 exceeds the WQO. The highest concentration was 48 mg/L reported."</i>	We suggest that wells MW 8 and MW 9 be removed from this sentence since MW 8 has no exceeded the WQO and MW-9 is not in service.
47	See Order for information	For clarification purposes, it has never been stated that the NASTS is able to treat wastewater to concentration of less 10 mg/L of nitrate measured as nitrogen. We believe that the NASTS will be able to treat wastewater to a concentration of less that 10 mg/L nitrate as nitrogen once the rehabilitation work is complete.
Page 23, Paragraph C.1	See Order for information	<p>The Patterson WQCF currently includes three parallel treatment systems. Two of the three are activated sludge processes and the third is an AIPS. Due to the different treatment systems, we recommend that there should be unique effluent limitations for each system.</p> <ul style="list-style-type: none"> <li>• The BOD and TSS limitations for the NASTS and SASTS should be &lt;20 mg/L,</li> <li>• BOD and TSS limitation for the AIPS should be &lt;40 mg/L.</li> <li>• Effluent limitations for nitrate measured as nitrogen for all three systems should be &lt;10 mg/L once the rehabilitation of the NASTS is completed.</li> </ul> <p>L&amp;R suggests that the TDS limitation be measured in the influent and</p>

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		not the effluent. This would better reflect salinity controls implemented in the collection system.
Page 25, Paragraph F.1.b.	See Order for information	The City has not budgeted for the workplan requested in the 2007-2008 budget. The City requests that the deadline for <b><i>Groundwater Monitoring Well Installation Workplan</i></b> be expended to September 1, 2008 to allow for the City to fund the workplan.
Page 26, Paragraph F.1.c.	See Order for information	The City has not budgeted for the requested plan. The City requests that the deadline for <b><i>Salinity Evaluation and Minimization Plan</i></b> be changed to April 1, 2009 to allow the City to add the plan to the 2008-2009 budget.
Page 27, Paragraph F.1.d.	See Order for information	For clarification, a technical memorandum was previously submitted in May 2006 which summarized the evaluation of the NASTS treatment performance and identified measures that could be implemented to optimize treatment. Therefore, we do not see the purpose of another evaluation.
Page 27, Paragraph F.1.e.	See Order for information	Again for budget purposes, we request the deadline for <b><i>Monitoring Well Installation Report</i></b> be revised to March 1, 2009.
Page 27, Paragraph F.1.f.	See Order for information	Again for budget purposes, we request the deadline for the <b><i>Groundwater Well Disinfection Report</i></b> to be revised to June 1, 2009, due to fiscal year budget
Page 27, Paragraph F.1.g.	See Order for information	We request a deadline of <u>120 calendar days</u> after completion of improvements described in Finding No. 13, rather than a set deadline of October 1, 2008.
Influent Monitoring		We suggest that TDS limits for compliance be monitored in the influent rather than effluent.
Effluent Monitoring		We suggest that TDS limits for compliance be monitored in the influent rather than effluent.
Information Sheet, Background section		We request that Paragraph 2 be revised per LEE & RO's comment on Order 8
Information Sheet, Solids and		We request that Paragraph 1 be revised per LEE & RO's comment on

Order	Draft Waste Discharge Requirements - Order	LEE & RO's Comments
Biosolids Disposal section		Order 9.
Information Sheet, Discharge Prohibitions and Specifications Section		Last Paragraph, for clarification, effluent limitations were based from August 2005 through July 2006 not December 2006 per RWD report.